

**IN THE CLAIMS:**

Please amend the claims as follows:

1. (Canceled)

2. (Previously Presented) A method of improving cholesterol levels in a subject in need of such improvement, the method comprising:

identifying a subject with hypercholesteremia or at a risk of developing hypercholesteremia having a "12" genotype for the second exon of the myostatin gene, wherein the subject is in need of improved cholesterol levels; and

engaging the subject in extensive exercise training for a period of time sufficient to improve the cholesterol levels in the subject.

3. (Canceled)

4. (Previously Presented) A method of improving diabetes status in a subject in need of such improvement, the method comprising:

identifying a subject with diabetes or at a risk of developing diabetes having an "11" genotype for the second exon of the myostatin gene, wherein the subject is in need of improved diabetes status; and

engaging the subject in extensive exercise training for a period of time sufficient to improve the diabetes status in the subject.

5. (New) The method of claim 2, wherein said extensive exercise training is at least 10 single courses of exercise over an exercise period from about 50 to 500 days.

6. (New) The method of claim 4, wherein said extensive exercise training is at least 10 single courses of exercise over an exercise period from about 50 to 500 days.